

DEPARTMENT OF THE ARMY  
US ARMY CENTER FOR HEALTH PROMOTION AND PREVENTIVE MEDICINE  
ABERDEEN PROVING GROUND, MD 21010-5403

## PEST MANAGEMENT BULLETIN

The *Pest Management Bulletin*, a quarterly publication of the U.S. Army Center for Health Promotion and Preventive Medicine (CHPPM) Entomological Sciences Program, is devoted to keeping installation pest management and preventive medicine personnel informed and up-to-date in the rapidly changing field of pest management.

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This Bulletin is designed to keep you informed. Therefore, your comments and suggestions are welcome. If you have a problem, a solution, or a personal observation about any aspect of pest management, please send it to us. Write to the following address: Commander, US Army Center for Health Promotion and Preventive Medicine, ATTN: MCHB-TS-OEN (*Pest Management Bulletin*), 5158 Blackhawk Road, Aberdeen Proving Ground, MD 21010-5403, or call us at DSN 584-3773 or commercial (410) 436-3773.

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## MIXING INCOMPATIBLE MATERIALS



The Georgia Pest Management Newsletter, September, 1998, Volume 21, no. 6

Mixing incompatible materials or adding

pesticide components in the wrong order can cause problems in the spray tank. To avoid problems, follow these guidelines. If you are not sure if pesticides or components are compatible, mix small amounts of the ingredients together in a glass jar. Use the same proportions that you would use in your ordinary spray mix. Shake the jar gently and wait for ten minutes. Look for large flakes, sludge, or other precipitates. A temperature change also indicates incompatibility.

Add pesticide ingredients in the following order:

1. compatibility agent (if needed)
2. wettable powders (first make a slurry with water in a bucket)
3. dry flowables or water dispersible granules
4. liquids (true liquids do not turn the mixture white)
5. emulsifiable concentrates (they will turn the mix white)
6. surfactants or crop oil

## POTENTIAL LOSS OF DDVP STRIPS



California Department of Pesticide Regulation has begun legal proceedings to

cancel the registrations of 11 pest strips containing DDVP. This potential cancellation is the result of a risk assessment finding that there is an inadequate margin of safety for children in residences and other indoor areas.

A spokesperson for California reported that the cancellation of registration could be avoided if the registrants remove the problematic sites from the label (motels, museums or public building)

According to the article, EPA, based on California's findings, "is considering its own actions against various DDVP products." (Pesticide and Toxic Chemical News, Vol 27, No.18, February 25, 1999.)

## E. L. PEYTON – 1929-1999

On 26 April 1999 we lost one of our most faithful and valuable employees, Mr. E.L. Peyton, Walter Reed Biosystematics Unit, Dept. of Entomology, Walter Reed Army Institute of Research. Mr. Peyton, almost 70 years old, was still working on the taxonomy of important vectors of disease when he died. His most recent contribution was the identification of *Aedes japonicus* in the United States, an introduction that may have important public health

consequences. Mr. Peyton had worked for the U.S. Army for 50 years, first as soldier (retiring as a MSGT), then as a contractor, and finally as a GS-12 Museum Specialist. He worked on mosquitoes throughout his career, displaying a dedication to his subject which is seldom matched. He was responsible for training many young officers and foreign scientists in the methods for collecting, preserving, and identifying mosquito specimens. His own research was always thorough, honest, and insightful -- showing a natural genius for the complications of taxonomy. (LTC Dan Strickman, Walter Reed Dept. of Entomology)

### ALDICARB AS A CAUSE OF FOOD POISONING



Louisiana, 1998. Cholinesterase-inhibiting pesticides (i.e., organic phosphates and carbamates), widely used in agriculture,

can cause illness if they contaminate food or drinking water. Aldicarb, a regulated carbamate pesticide, is highly toxic, and the U.S. Environmental Protection Agency (EPA) requires applicators to be trained and certified. This report describes a foodborne outbreak of aldicarb poisoning that occurred when improperly stored and labeled aldicarb was used mistakenly in food preparation. On July 19, 1998, 20 employees attended a company lunch prepared from homemade foods. Shortly after eating, several persons developed neurologic and gastrointestinal symptoms. Ten visited a hospital emergency department, and two were hospitalized. On

July 20, a hospital infection-control nurse reported the incident to the Louisiana Office of Public Health, which then investigated the outbreak. Investigators interviewed all 20 lunch participants about illness and foods eaten during the meal; 14 (70%) reported gastrointestinal or neurologic symptoms. The most common gastrointestinal symptoms were abdominal cramps (13 {93%}), nausea (13 {93%}), and diarrhea (12 {86%}). Neurologic symptoms included dizziness (13 {93%}), sweating (12 {86%}), muscle fasciculations (12 {86%}), eye twitching (eight {57%}), and blurred vision (six {43%}). Illness lasted a median of 4 hours (range: 1-8 hours). Median time between ingestion of food and onset of symptoms was 45 minutes (range: 40 minutes-3 >hours). The heart rate of one of the two persons hospitalized was 20 beats per minute on arrival at the emergency department, but his heart rate increased after treatment with atropine. The second person was hospitalized for an increased and irregular heartbeat that responded to treatment with digitalis. The lunch consisted of pork roast, boiled rice, cabbage salad, biscuits, and soft drinks. Only the cabbage salad was associated with illness. Of the 16 persons who ate the cabbage salad, 14 became ill (attack rate: 88%); the four persons who had not eaten the cabbage salad did not develop symptoms (attack rate: 0%,  $p=0.003$ , Fisher's exact test). The employee who prepared the cabbage salad reported mixing two 1-lb bags of precut, prepackaged cabbage in a bowl with vinegar and ground black pepper. The black pepper came from a can labeled "black pepper" that he had found 6 weeks before the lunch in the truck of a deceased relative. This black pepper had not been used by the employee for food preparation before the company lunch. The

cabbage salad was prepared the night before the lunch and stored in the refrigerator until it was brought to work and served at approximately 11 a.m. The contents of the black pepper container were tested for organophosphate and carbamate pesticides. High-performance liquid chromatography identified the granules in the container as 13.7% aldicarb, the pesticide Temik® 15G. A 6-g portion of cabbage salad contained 272.6 parts per million (ppm) of aldicarb. The deceased owner of the pepper can had been a crawfish farmer. After its investigation, the Louisiana Department of Agriculture and Forestry believed the crawfish farmer had used aldicarb on bait to prevent destruction of his crawfish nets, ponds, and levees by wild dogs and raccoons. The source of the TEMIK® 15G could not be determined despite the department's extensive trace-back effort.

Reported by: TA Farley, MD, L McFarland, DrPH, State Epidemiologist, Infectious Disease Epidemiology Section, Louisiana Dept of Health and Hospitals; J McClelland, Louisiana Dept of Agriculture. Health Studies Br, Div of Environmental Hazards and Health Effects, National Center for Environmental Health; Div of Applied Public Health Training, Epidemiology Program Office; and an EIS Officer, CDC.

(Morbidity and Mortality Weekly Reporter (MMWR), April 9, 1999, 48(13); 269-271.

## AFPMB DIRECTORY UPDATE



MAJ Richard Johnson of the Defense Pest Management Information Analysis Center (DPMIAC) would

like to remind to review the new Directory of *DoD Pest Management Professionals, Natural Resource Managers and The Armed Forces Pest Management Board*. In particular, please verify the e-mail addresses. If you have changes or additions, please send them to MAJ Johnson at [johnsorn@acq.osd.mil](mailto:johnsorn@acq.osd.mil).

## IT'S IN THE NEWS






### **Voluntary Cancellation.**

Bayer Corporation has requested the voluntary cancellation of all products containing

isofenphos. Bayer said that the proposed cancellation was an economic decision based on the availability of alternative products and the availability of new and advanced ingredients for grub and mole cricket control.

The following products are affected:

-  Oftanol 5% Granular Insecticide: turf and ornamental use
-  Oftanol 5% Granular Insecticide
-  Oftanol 1.5% Granular Insecticide Lawn Food and Insecticide

☞ Oftanol 2 Insecticide (Effective 9/30/99)

☞ Oftanol Technical (Effective 12/31/99)

### CHEMICALLY SPEAKING

May 7, 1999. Washington Post, Page A38

Angela Logomasini, director of risk and environmental policy at the Washington-based Competitive Enterprise Institute, writes that it is ironic that environmental groups and others jumped ship from the Environmental Protection Agency's food-quality advisory panel on the same day that President Clinton presented the National Medal of Science to Bruce Ames for his work on chemical risks, particularly pesticides. These groups think that the EPA is being too lenient when setting new pesticide standards. Dr. Ames's research clearly shows that the EPA is more likely being too harsh.

Dr. Ames's research, says Logomasini, shows that pesticide residues at current exposure levels pose little, if any, risk to public health. In fact, consuming large amounts of fruits and vegetables even with pesticide residues is our best defense against cancer (in addition to not smoking). And, as Dr. Ames has found, obsessing about synthetic chemicals makes little sense given that 99.9 percent of the chemicals we consume are naturally occurring at levels thousands of times that of synthetic pesticides. In 1996, a National Academy of Sciences study similarly found that "the great majority" of natural and synthetic chemicals in our diet are present at levels "so low that they are unlikely to pose any appreciable cancer risk."

Despite environmentalists' claims, the EPA is employing some of their faulty

assumptions about pesticide risks, which could raise the price of produce and increase cancer rates by reducing produce consumption. If these seven groups are truly interested in public health, they would stop hyping scientifically unfounded claims.

### PARASITES, NOT POLLUTION, RESPONSIBLE FOR SOME FROG DEFORMITIES



April 29, 1999

Science 30 April Issue

American Association for the Advancement of Science

Gabriel Paal, Heather

Singmaster

Washington DC -- Frogs with multiple limbs and other disfigurements have been reported more and more often over the last several years, feeding worries that the ecologically sensitive amphibians are bellwethers of some larger environmental catastrophe. But now two studies in the 30 April issue of Science provide the strongest evidence yet that at least some of the frogs' bizarre deformities are the direct result not of pesticides or ozone loss, but of a parasite that naturally infects the animals.

Scientists first began noticing a global decline in amphibian populations about 15 years ago, but public concern really took off in the mid-1990s, when a group of schoolchildren in Minnesota discovered a strikingly high rate of limb deformities in local frogs. Speculation as to the cause has included possible DNA damage to frog embryos (as a result of too much UV light passing through the thinning

ozone layer) and pollution from pesticide run-off. A strong candidate for the latter has been the powerful chemicals known as retinoids. In amphibians-which regenerate lost limbs-retinoids can scramble the genetic information at the site of the new limb bud, resulting in what looks like multiple legs. But in one of the Science reports, Stanley Sessions and colleagues provide firm evidence in support of another candidate, which Sessions first put forth in 1987: small parasitic flatworms called *Riberoria* trematodes. These creatures burrow into the hindquarters of tadpoles where they physically rearrange the limb bud cells and thereby interfere with limb development. "It's about as close to using an egg beater on the limb bud cells as you can get," said Sessions. Sessions and his colleagues drew upon earlier laboratory studies showing that burrowing parasites cause a different type of limb deformation than the chemical effects of retinoids. Retinoids turn a limb bud topsy-turvy, the most common result being that cells that would normally develop at the end of a limb grow at the base of the limb, and cells intended for the base develop at the tip. This results in a characteristic thigh-knee-thigh-knee pattern. In the case of trematode infections, however, two or three properly patterned limbs sprout from one limb bud, each the mirror image of the one next to it. Taking these laboratory results into the field, Sessions and his colleagues studied five species of frogs from twelve different locations in California, Oregon, Arizona, and New York. They found none of the thigh-knee-thigh-knee deformities that are the exclusive signature of retinoids, and found many of the mirror-image deformities that are mostly characteristic of parasite infections.

While Sessions' team was sampling frogs from ponds around the country, another team of scientists was working inside their lab at Stanford University, gathering more evidence in support of the trematode theory. As detailed in Science's second report, Pieter Johnson and his colleagues exposed tadpoles to trematodes under carefully controlled conditions. The tadpoles grew into frogs with deformed hind legs that closely matched deformed frogs found in the wild. In contrast, tadpoles raised without any exposure to parasites developed free of deformities. "It worked much better than I had expected," said Johnson. "We found a high frequency of deformities even [under conditions with] low parasite density." Along with two of his three colleagues, Johnson is a recent college graduate; he began the research as an honors thesis project.

The two reports do not put an end to scientists' concerns about amphibians, however. Other kinds of frog deformities are being reported, including missing or malformed limbs and eyes, which may be caused by something other than parasites. In fact, multiple limbs are not even the most common type of deformity, though they may be the most striking. "We've chipped off the most mysterious-looking piece of the deformed limb puzzle," said Sessions. "That's how we have to do it. First we have to figure out what's causing these deformities. Then we can roll up our sleeves and look at what's happening over time. We need to ask whether the rate of deformities has been increasing, and if so, why?"

Johnson and Sessions both think that the parasites may exploit the frogs' deformities

as part of their own reproductive cycle. After hatching in pond water, the immature trematodes infect aquatic snails, where they reproduce asexually, increasing their numbers to the point where they often kill the snail. Back in the water, the trematode larvae next seek out tadpoles and burrow into their hind leg regions. Later, aquatic birds prey on the grown frogs and the parasites then have a third host, where they reproduce sexually. Finally, the eggs reach another pond via the birds' feces and the cycle begins again. Because birds prey upon them much more often than normal frogs, deformed frogs may play an unfortunate but critical role in the parasite's reproduction strategy.

Although parasite infections appear to be the direct cause of multiple limb deformities, human activities might be exerting a less direct influence by affecting the populations of one of the trematode's other hosts. For example, fertilizer-filled run-off could be spiking the ponds with excess nutrients, which in turn would boost the populations of the aquatic snails. More research is necessary to understand the natural fluctuation in trematode populations before scientists can draw any conclusions about human effects. What's more, these deformities may not be on the rise at all, just more frequently reported by a newly alert public.

In fact, Sessions speculates that parasite-induced infections may actually be a sign that all is well in the frog environment. Only robust cells in the limb bud can divide and form multiple limbs. This rigorous response to local infections, he says, may in fact suggest that the tadpoles are otherwise healthy.

## IPMIS UPDATE



Since the last issue of the Pest Management Bulletin the Armed Forces Pest Management Board (AFPMB) has met

with DESCIM representatives to evaluate the reports generated by the IPMIS system. In general, there were some errors discovered in the reports. Reports 5, 6 and 8 incorrectly report the information from the database. All of the other reports accurately report the data. But some contain formatting errors. These errors have been reported to the AFPMB who, will in turn, report them to DESCIM.

The current program does have a mechanism for exporting the data from the database. However, there is still no mechanism by which this data can be consolidated at the MACOM/MAJCOM level. This problem is being looked at by the AFPMB.

## "POISON FREE" PESTICIDES



You may have seen by now some pesticide products that are claiming to be "Poison Free." You will note when you look at these products that they do not have an EPA Registration Number on the label. This is not a mistake! Section 25 (b) of FIFRA allows the Administrator of EPA to exempt any material



considered “to be of a character which is unnecessary to be subject to this Act in order to carry out the purposes of this Act.” Currently, any products containing the following active ingredients are exempt from registration.

Castor oil (U.S.P. or equivalent)  
Cedar oil  
Cinnamon and cinnamon oil  
Citric acid  
Citronella and citronella oil  
Cloves and clove oil  
Corn gluten meal  
Corn oil  
Cottonseed oil  
Dried blood  
Eugenol  
Garlic and garlic oil  
Geraniol  
Geranium oil  
Lauryl sulfate  
Lemongrass oil  
Linseed oil  
Malic acid  
Mint and mint oil  
Peppermint and peppermint oil  
2-Phenethyl propionate (2-phenylethyl propionate)  
Potassium sorbate  
Putrescent whole egg solids  
Rosemary and rosemary oil  
Sesame (includes ground sesame plant) and sesame oil  
Sodium chloride (common salt)  
Sodium lauryl sulfate  
Soybean oil  
Thyme and thyme oil  
White pepper  
Zinc metal strips (consisting solely of zinc metal and impurities)

## WHAT'S UP DOC?



→ The Clorox Sales Company has announced the following new and/or changed products.

**Maxforce Fine Granule (FG) Insect Bait.** This is the same formulation as the Maxforce Granular Insect Bait but in a

50% smaller particle size for small ant control. It is available in a 6 lb. Jug and a 10 oz. Refillable shaker container.

**The Maxforce Granular Insect Bait** is now available in a 25 lb. plastic bucket.

→ Woodstream Corporation has announced their **Victor® Poison-Free Wasp and Hornet Killer**. According to the manufacturer, the product kills wasps and hornets using a foaming action that encapsulates insects. The active ingredients are mint oil and sodium lauryl sulfate.

→ Waterbury Companies, Inc. have a series of products.

**CB® Borid® Turbo Insecticide with Boric Acid.** For use in homes, hospitals, nursing homes, schools & food handling establishments for cockroach, carpenter ant and termite control. Contains 20% Orthoboric Acid.

**CB-38 Extra™ Insecticide with Pyrethrins.** This is registered for use in restaurants and other food handling establishments, meat packing and food processing plants, food storage areas,



hospitals, supermarkets and motels, hotels, residences, transportation equipment and utilities. Contains 0.30% pyrethrins and 2.40% piperonyl butoxide.

**Strikeforce™ HPX Residual With Dursban®.** Registered for restaurants and other food handling establishments, meat packing and food processing plants, food storage areas, hospitals, supermarkets, motels and hotels, residences, transportation equipment and utilities. Contains 0.05% chlorpyrifos.

**CB-80 Extra™ Insecticide with Pyrethrins.** For use in restaurants and other food handling establishments, meat packing and food processing plants, food storage areas, hospitals, supermarkets, motels and hotels, residences, transportation equipment and utilities. Contains 0.50% pyrethrins and 4.00% piperonyl butoxide.

**Intruder™ HPX Residual With Cyfluthrin.** For use in restaurants and other food handling establishments, meat packing and food processing plants, food storage areas, hospitals, supermarkets, motels and hotels, residences, transportation equipment and utilities. Contains 0.10% cyfluthrin, 0.05% pyrethrins, and 1.00% piperonyl butoxide.

→ Farnam Pest Control Division has provided information on the following products.

**Fly Inn™ Window Traps.** Decorated sticky traps designed to go in the corner of a window.

**Musca-Stick™ Sticky Fly Trap.** According to Farnam, this features

Exclusive Musca-Glo™ paper that is orange colored and has grouping of flies pictured on the paper.

**Musca-Cide™ Fly Bait Station.**

According to Farnam, this keeps the Musca-Cide Fly Bait it keeps the bait effective 10 days or more. It attracts and kills flies within a 250 sq. ft. area. It may be placed on a flat surface or hung above the ground.

**Musca-Doom™ Disposable Fly Trap.**

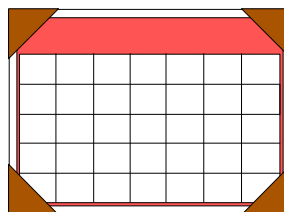
According to Farnam, this holds over 10,000 flies, works without insecticides, contains patented attractants, won't blow in the wind and is easy to move around to where most flies are throughout the day.

**Musca-Terminator™ and Musca-Terminator Jr.™ Fly Traps.** Two sizes available: 2 ½ gallon Musca-Terminator and 1 gallon Musca-Terminator Jr.

**Trap-A-Jack™ Disposable Yellow Jacket Trap.** Includes bait and bait enhancer for increased effectiveness. Proven effective with yellow jackets, meat bees, garbage bees and other annoying flying insects.

**Catch 'N Pitch™ Disposable Fly Trap with Attractant.** Contains feeding and sex stimulants. For use in barns, kennels, stables, yards and trash disposal areas.

## UPCOMING EVENTS



**\*\* 1999 \*\***

*JUNE*  
7 - 8 June 1999.  
**Pesticide Safety  
and Applicator**

**Certification**, Clarion Hotel, Sacramento, Calif. Contact: Okumura Biological Institute, 916/421-8963.

12 - 16 June 1999. **Society for Tropical Veterinary Medicine, 5th Biennial Conference (STVM'99)**, Key West, Florida. Contact: Paul Gibbs, Conference Chair, Society for Tropical Veterinary Medicine '99, TEL: (352) 392-5323, FAX: (352) 392-5685, e-mail: pgibbs@nersp.nerdc.ufl.edu or visit the web site at: <http://www.ifas.ufl.edu/~conferweb/stvm.htm>

16-19 June 1999. **Pest Control Operators of California, Inc.'s (PCOC's) 56th Annual Convention and Trade Show**, The Cathedral Hill Hotel, San Francisco, Calif. Contact: PCOC, 916/372-4363.

22-24 June 1999. **Florida Pest Control Association (FPCA) Annual Meeting**, Marriott Bay Point Resort, Panama City Beach, Fla. Contact: FPCA, 407/293-8627.

June 1999. **Biological Control of Weeds Working Group**, Bozeman, MT. Contact: Neal R. Spencer, USDA/ARS, (406) 482-2020, e-mail [nspencer@sidney.ars.usda.gov](mailto:nspencer@sidney.ars.usda.gov)

#### *JULY*

5 - 9 July 1999. **10th Biological Control of Weeds International Symposium**, Bozeman, MT. Contact: N.R. Spencer, USDA/ARS, 1500 North Central, Sidney, MT 59270, 406-482-9407 or email [nspencer@sidney.ars.usda.gov](mailto:nspencer@sidney.ars.usda.gov) or the website at <http://www.symposium.ars.usda.gov>

19 - 22 July 1999. **The 3rd International Conference on Urban Pests**, Czech University of Agriculture, Prague. Contact: Dr. F. Rettich, National Institute of Public Health, Prague 10, Srobarova 48, 100 42 Czech Republic, Phone 4202 67 08 22 83, e-mail [Rettich@szu.cz](mailto:Rettich@szu.cz) or check out the web page at <http://www.szu.cz/rettich/icup99.htm>

22-24 July 1999. **National Pest Control Association (NPCA) Academy**, Tucson, Ariz. Contact: NPCA, 703/573-8330.

22-25 July 1999. **Georgia Pest Control Association (GPCA) Summer Conference**, Sawgrass Resort, Jacksonville, Fla. Contact: GPCA, 770/417-1881.

#### *AUGUST*

21-25 August 1999. **Association of Structural Pest Control Regulatory Officials' (ASPCRO's) Annual Meeting**, Lexington, Ky. Contact: John McCauley, 502/564-7274.

29 August - 3 September 1999. **Seventh International Conference on the Juvenile Hormones**, Mount Scopus Campus of the Hebrew University of Jerusalem, Israel. Contact: Ms. Devora Weisberger at [jhvii@indycc1.agri.huji.ac.il](mailto:jhvii@indycc1.agri.huji.ac.il) or look at [www.agri.huji.ac.il/~jhvii](http://www.agri.huji.ac.il/~jhvii)

#### *SEPTEMBER*

8-10 September 1999. **BPCC '99, the Second International Pest Control Conference and Expo**, Hotel Ezustpart Conference Centre, Siofok, Hungary. Contact: Babolna Bioenvironmental Centre Ltd., e-mail [babolnab@mail.matav.hu](mailto:babolnab@mail.matav.hu).

8-12 September 1999. **Responsible Industry for a Sound Environment (RISE) meeting**, Avon, Colo. Contact: RISE, 202/872-3860.

13 - 15 September 1999. **Royal Entomological Society National Meeting (including 20th Symposium)**. Imperial College, London. Contact: Dr. Hefin Jones. Ecotron Project Leader, NERC Center for Population Biology, Imperial College at Silwood Park, Ascot, Berkshire SL5 7PY, Phone: +44-(0)1344-294483.

27 September 1999. **Pesticide Safety and Applicator Certification**, Clarion Hotel, Sacramento, Calif. Contact: Okumura Biological Institute, 916/421-8963.

#### OCTOBER

13-14 October 1999. **Bird Barrier/Van Waters and Rogers Bird Control Class**, Denver, Colo. Contact: Randy Dodrill, 303/388-5651.

27-30 October 1999. **National Pest Control Association (NPCA) Pest Management 99**, World Congress Center, Atlanta, Ga. Contact: NPCA, 703/573-8330.

#### NOVEMBER

1-2 November 1999. **Bird Barrier/Van Waters and Rogers Bird Control Class**, Woodbridge, N.J. Contact: Greg TenHoeve, 732/636-4660.

4-5 November 1999. **Bird Barrier/Van Waters and Rogers Bird Control Class**, Orlando, Fla. Contact: Jim Watson, 407/843-2611.

#### DECEMBER

**\*\*\*\*\* 2000 \*\*\*\*\***

#### FEBRUARY

5 - 10 February 2000. **Weed Science Society of America Annual Meeting**, Toronto, Canada. Contact: WSSA, J. Breithaupt, P.O. Box 1897, Lawrence, KS, 913-843-1235 or e-mail [jbreith@allenpress.com](mailto:jbreith@allenpress.com)

#### AUGUST

20 - 26 August 2000. **XXI International Congress of Entomology**, Iguassu Falls, Brazil. Contact: XXI International Congress of Entomology, c/o Dr. Decio Luiz Gazzoni, P.O. Box 231, 86001-970 Londrina-PR, Brazil. For more information, check out the WWW site at <http://www.embrapa.br/ice>

### UPDATED STOCKED PESTICIDE LIST



In Appendix A, you will find the updated Stocked Pesticide List. Please note that the changes in this list are denoted in bold print.

### COURSES FOR DoD PEST MANAGEMENT PERSONNEL



Appendix B of this Bulletin provides a listing of various courses provided by DOD. If you have additional questions concerning any of these courses,

please contact the listed POC for the course.

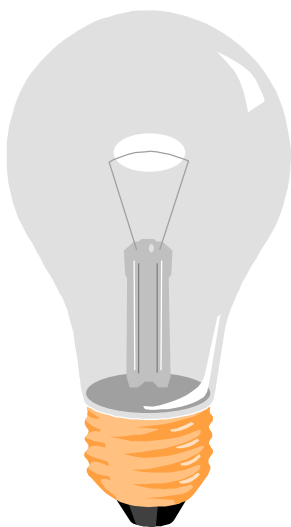
## DOD EQUIPMENT LIST



In this issue of the Bulletin, we are continuing the inclusion of the DOD Pest Management Equipment List. This most current listing can always be found on the Armed Forces Pest

Management Board webpage: <http://afpmb-www.acq.osd.mil>.

## ON THE LIGHTER SIDE



### DID YOU KNOW?

→ The average chocolate bar has eight insects' legs in it.

→ The average human eats eight spiders in their lifetime at night.

→ A rhinoceros horn is made of

compacted hair.

If you keep a goldfish in a dark room, it will eventually turn white.

A snail can sleep for three years.

Cats have over one hundred vocal sounds, dogs only have about ten.

## SOME THINGS HEARD ON AIRPLANES

"There may be 50 ways to leave your lover, but there are only 4 ways out of this airplane..."

"We do feature a smoking section on this flight; if you must smoke, contact a member of the flight crew and we will escort you to the wings."

"Smoking in the lavatories is prohibited. Any person caught smoking in the lavatories will be asked to leave the plane immediately."

Pilot - "Folks, we have reached our cruising altitude, so I am going to switch off the seat belt sign. Feel free to move about as you wish, but please stay inside the plane till we land... it's a bit cold outside, and if you walk on the wings it affects the flight pattern."

After landing: "Thank you for flying Delta Business Express. We hope you enjoyed giving us the business as much as we enjoyed taking you for a ride."

## APPENDIX A

### LIST OF STANDARD PESTICIDES AVAILABLE TO DOD

NSN 6840-	Item (Alternative Trade Name)	Unit Package	AAC*	Price	Unit Issue	User
00-063-3981	Algaecide, Copper Sulfate, 80.16% pentahydrate, crystal (Cuprose)	50-lb bag	L	-----	BG	
00-281-2724	Fungicide, Wood Preservative, copper naphthenate mixture (COP-R-NAP)	55-gal drum	J	1208.20	DR	A,N
00-282-0971	Fungicide, Wood Preservative, copper naphthenate mixture (COP-R-NAP)	5-gal cont	D	262.14	CO	A,N,F
01-209-6298	Fungicide, Wood Preservative, copper naphthenate mixture (COP-R-NAP RTU)	5-gal cont	L	-----	CO	A
01-360-4741	Fungicide, Methylisothiocyanate (MITC-FUME) ***RESTRICTED USE PESTICIDE***	18 tubes	L	-----	CO	A,N,F
01-457-6588	Fungicide, Methyl Azoxystrobin, 50% (Heritage)	(6) 1 lb cont	J	2100.00	BX	A,N,F
00-027-6467	Herbicide, Borate-Bromacil mixture, 94% sodium metaborate tetrahydrate, 4% bromacil, granular (Borocil IV)	50-lb bag	V	111.03	BG	A,N,F
00-392-7593	Herbicide, Bromacil, 21.9% lithium salt of bromacil, liquid (Hyvar X-L)	(2) 2.5-gal cont	D	306.16	BX	A,N,F
00-181-7106	Herbicide, Bromacil, 40.8%, water soluble liquid (Bromax-4L)	5-gal drum	D	689.52	DR	A,N,F
01-408-9079	Herbicide, Bromacil, 40.8%, wettable powder (Hyvar X)	(12) 4-lb bags	H	967.98	BX	A,N,F
00-684-8975	Herbicide, Chlorate-Borate mixture, 30% sodium chlorate, 68% sodium metaborate tetrahydrate, granular (Monobor Chlorate)	50-lb bag	Z	62.97	BG	A,N,F
01-005-7523	Herbicide, Diquat, 35.3%, water soluble liquid (Reward)	1-gal cont	D	116.93	GL	F
00-815-2799	Herbicide, Diquat, 35.3%, water soluble liquid (Reward)	(2) 2.5-gal cont	D	650.43	BX	A,N,F
01-341-9346	Herbicide, Diuron, minimum 80% diuron, granular	25-lb bag	Z	116.93	BG	A,N,F
00-001-7710	Herbicide, Diuron-Bromacil mixture, 40% bromacil, 40% diuron, granular (Krovar I DF)	6-lb bag	D	70.96	BG	A,N,F
01-108-9578	Herbicide, Isopropylamine salt of glyphosate, 41%, water soluble liquid (Roundup Pro)	(2) 2.5-gal cont	D	304.10	BX	A,N,F
01-388-0142	Herbicide, Isopropylamine salt of glyphosate, 41%, water	30-gal drum	D	1790.56	DR	A,N,F

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	soluble liquid (Roundup Pro)					
01-356-8893	Herbicide, Isopropylamine salt of glyphosate, 41%, water soluble liquid (Rodeo)	(2) 2.5-gal cont	D	679.93	BX	A,N,F
01-377-7113	Herbicide, Isopropylamine salt of glyphosate, 0.96%, water soluble liquid (Roundup Ready-to-Use)	24-oz pump spray bottle	D	5.61	BT	F
01-399-0673	Herbicide, Isopropylamine salt of glyphosate, 0.96%, water soluble liquid (Roundup Dry Pack)	25 pkt	D	53.59	BX	A,N,F
01-356-8902	Herbicide, Isopropylamine salt of imazapyr, 27.6% (Arsenal)	(2) 2.5-gal cont	D	1190.26	BX	A,N,F
01-318-7417	Herbicide, Oryzalin, 40% (Sulflan A.S.)	1-gal bot	L	-----	GL	A,N,F
00-145-0013	Herbicide, Prometone, 25% prometone, emulsifiable concentrate (Pramitol 25E)	5-gal can	D	96.05	CN	A,F
00-180-6386	Herbicide, Prometone, 50% sodium metaborate, 40% sodium chlorate, 5% prometone, 0.75% simazine, pellets (Pramitol 5PS)	50-lb bag in a drum	D	140.27	DR	A,N,F
01-319-2890	Herbicide, Tebuthiuron (Spike 80W)	4-lb bag	L	-----	BG	A,N,F
01-457-6576	Herbicide, Tebuthiuron-Diuron, 1% Tebuthiuron, 3% Diuron (Spraykill SK-13)	40 lb cont	J	<b>98.29</b>	CO	A,N,F
00-577-4194	Herbicide, 2,4-Dichlorophenoxy-acetic acid (2,4-D), oil miscible/water emulsifiable liquid (low volatile ester form)	(2) 2.5-gal cont	H	104.70	BX	A,N,F
00-577-4195	Herbicide, 2,4-Dichlorophenoxy-acetic acid (2,4-D), oil miscible/water emulsifiable liquid (low volatile ester form)	55-gal drum	H	700.00	DR	A,N,F
00-664-7060	Herbicide, 2,4-Dichlorophenoxy-acetic acid (2,4-D), water soluble liquid (amine salt form)	(2) 2.5-gal cont	H	88.43	BX	A,N,F
01-377-7110	Herbicide, 2,4-Dichlorophenoxy-acetic acid (2,4-D), 0.4%, water soluble liquid (amine salt form) (Weed-B-Gon)	24-oz pump spray bottle	D	6.53	BT	F
00-753-4963	Insect Repellent, clothing application, 75% DEET, 25% ethanol	2-oz bottle	D	1.37	BT	A,N,F
01-278-1336	Insect Repellent, clothing application, aerosol (Permethrin Arthropod Repellent)	(12) 6-oz cans	D	37.05	BX	A,N,F
01-284-3982	Insect Repellent, personal application, (3M/EPA 58007-1)	(12) 2-oz tubes	D	32.88	BX	A,N,F
01-334-2666	Insect Repellent, clothing application, 40% permethrin, liquid (2-Gal sprayer)	(12) 151-ml bot	D	162.11	BX	A,N,F
01-137-8456	Insect Repellent, personal application, 3% benzocaine, 10% precipitated sulfur (Chigg-Away)	188-ml bot	D	2.31	BT	A,N,F
01-288-2188	Insect Repellent, personal application & sunscreen, 20%	(12) 2-oz tubes	D	43.51	BX	A,N,F

	DEET/SPF15 (Sunset)					
01-452-9582	Insect Repellent, personal application & sunscreen, 20% DEET/SPF15 (Sunset)	320 packets	J	197.63	BX	A,N
01-345-0237	Insect Repellent, clothing application, permethrin (IDA)	12 kits	D	43.53	BX	A,N,F
00-142-8965	Insect Repellent, personal application, 30% DEET (Cutter Insect Repellent Stick)	(12) 1-oz tubes	D	31.02	BX	A,N,F
00-145-0016	Insecticide, Aluminum phosphide, 55 % tablets (Phostoxin/Fumitoxin) *** <b>RESTRICTED USE PESTICIDE</b> ***	100 tablets	D	24.26	CN	A,N,F
00-442-5698	Insecticide, Aluminum phosphide, 55 % tablets (Phostoxin/Fumitoxin) *** <b>RESTRICTED USE PESTICIDE</b> ***	1660 pellets	D	34.57	BT	A,N,F
01-377-7049	Insecticide, <i>Bacillus thuringiensis</i> , 10% (Bactimos Briquets)	100 briquets	D	74.57	BX	A,N,F
00-180-6069	Insecticide, Baygon, 1% propoxur, liquid (Roach and Ant Spray)	1-gal can	V	10.99	GL	A,N,F
01-287-3938	Insecticide, Boric Acid, aerosol (Whitmire PT 240 Perma-dust)	(12) 16 oz cans	D	77.85	BX	A,N,F
00-932-7297	Insecticide, Carbaryl, 80%, water dispersible powder (Sevin 80S)	(5) 10-lb bags	H	248.61	BX	A,N,F
01-104-0887	Insecticide, Carbaryl, 42.6%, liquid (Carbaryl 4L)	(2) 2.5-gal cont	D	154.99	BX	F
01-033-4481	Insecticide, Carbaryl, 5%, dust (Sevin 5% dust)	(12) 4-lb bags	D	139.28	BX	A,N,F
01-224-1269	Insecticide, fipronil, cockroach, large size (Combat Quick Kill)	8 bait stations/box/12 boxes	D	83.50	PG	A,N,F
01-180-0167	Insecticide, fipronil, cockroach, regular size (Combat Quick Kill)	12 bait stations/box/12 boxes	D	81.44	PG	A,N,F
01-313-7.359	Insecticide, Cyfluthrin (Tempo 2EC)	(12) 240-ml bot	J	407.05	BX	A,N,F
01-383-6251	Insecticide, Cyfluthrin (Tempo 20WP)	(288) 9.5-g pack	D	386.14	BX	A,N,F
01-390-4822	Insecticide, Cypermethrin (Demon WP)	1-lb jar	J	51.57	LB	A,N,F
01-431-3345	Insecticide, Deltamethrin (Delta Dust)	1-lb cont	D	11.88	LB	A,N,F
00-753-5038	Insecticide, Diazinon, 2%, dust	25-lb can	D	30.79	CN	A,N,F
00-782-3925	Insecticide, Diazinon, 47.5%, emulsifiable concentrate	1-gal can	D	39.18	GL	A,N,F
00-955-0931	Insecticide, Diazinon, 2%, dust	5-lb bag	J	13.65	BG	A,F,N
00-142-9438	Insecticide, Dichlorvos, 20% (plastic strips)	48 strips	D	183.24	BX	A,N,F
01-412-4634	Insecticide, D-Phenothrin, 2%, aerosol	12-oz can	D	6.50	CN	A,N,F
01-067-2137	Insecticide, D-trans Allethrin and Resmethrin, 0.15% and	11-oz can	D	1.79	CN	A,N,F



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	0.2% minimum, respectively, aerosol					
01-122-2651	Insecticide, Dursban, 42% chlorpyrifos, emulsifiable concentrate (Dursban 4E)	1-gal can	D	124.17	GL	N,F,M
01-338-6003	Insecticide, Dursban, 20% chlorpyrifos, microencapsulated (Empire 20)	1-pint cont	D	25.26	PT	A,N,F
01-270-9766	Insecticide, Dursban, 42.8% chlorpyrifos, emulsifiable concentrate (Dursban TC)	(4) 1-gal cont	D	266.57	BX	A,N,F
00-402-5411	Insecticide, Dursban, 42% chlorpyrifos, emulsifiable concentrate (Dursban 4E)	5-gal can	D	516.40	CN	A,N,F
01-203-6161	Insecticide, Dursban, 19.36% chlorpyrifos, liquid (Mosquitomist 1.5 ULV)	5-gal can	D	264.15	CN	A,N,F
01-338-2487	Insecticide, Dursban, 0.5% chlorpyrifos, aerosol (PT 279-Engage)	(12) 20-oz cans	D	103.47	BX	A,N,F
01-210-3392	Insecticide, Dursban, 42% chlorpyrifos, emulsifiable concentrate (Dursban LO)	(20) 40-ml bot	D	29.35	BX	A,N,F
01-412-4361	Insecticide, Dursban, 20% chlorpyrifos, emulsifiable concentrate (Dursban Pro)	1-pint cont	H	10.02	PT	A,N,F
01-087-6672	Insecticide, Ficam, 76% bendiocarb, wettable powder (Ficam)	1-lb jar	D	77.92	LB	A,N,F
01-183-7244	Insecticide, Fly Bait, 1% methomyl (Apache/Flytek/Golden Malrin)	5-lb can	D	17.87	CN	A,N,F
01-287-3913	Insecticide, Hydramethylnon (Amdro Fire Ant Bait)	(24) 6-oz bot	L	-----	BX	A,N,F
01-298-1122	Insecticide, fipronil (MaxForce Ant Bait)	96 stations	D	90.84	PG	A,N,F
01-318-7416	Insecticide, Hydroprene, emulsifiable concentrate (Gentrol IGR)	(10) 1-oz bot	D	97.12	BX	A,N,F
01-457-6580	Insecticide, Imidacloprid, 5% granular (Merit 0.5G)	30 lb bag	J	50.00	BG	A,N,F
01-428-6646	Insecticide, Lambda-cyhalothrin, 9.7% (Demand CS)	(8) 8 oz bottle	J	360.00	BX	A,N,F
01-431-3357	Insecticide, Lamda-cyhalothrin (Demand Pesttab)	40 tablets	D	<b>69.00</b>	CO	A,N,F
01-424-2494	Insecticide, Logic (Award Brand of Logic)	25-lb bag	J	260.89	BG	A,N,F
00-655-9222	Insecticide, Malathion, 57.0%, emulsifiable concentrate, class 1	1-gal cont	D	34.30	GL	A,N,F
00-685-5437	Insecticide, Malathion, 57.0%, emulsifiable concentrate, class 2	55-gal drum	Z	1463.76	DR	A,N,F
00-685-5438	Insecticide, Malathion, 57.0%, emulsifiable concentrate, class 1	5-gal can	D	130.80	CN	A,N,F
00-926-1481	Insecticide, Malathion, 95%, liquid, grade B	54-gal drum	D	1726.07	DR	A,N,F

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01-169-1842	Insecticide, Malathion, 95%, liquid, grade B	5-gal can	D	111.09	CN	A,N,F
01-424-2495	Insecticide, Methoprene (Altosid XR Briquets)	220 briquets	D	681.97	BX	A,N,F
01-424-2493	Insecticide, Methoprene (Altosid SR-20 Liquid Larvicide)	(2) 2.5-gal cont	J	4751.36	BX	A,N,F
01-270-9765	Insecticide, N-ethyl perfluorooctane sulfonamide ( <b>Advance</b> Dual Choice)	24 stations	D	39.51	BX	A,N,F
01-270-9765	Insecticide, Naled, 85%, liquid (Dibrom)	30-gal drum	J	3331.90	DR	A,N,F
00-597-6111	Insecticide, Naphthalene, ball form	1-lb box	D	5.80	LB	A,N,F
00-286-6018	Insecticide, Naphthalene, flake GSA	1-lb box	Y	<b>3.00</b>	LB	A,N,F
00-174-1825	Insecticide, P-Dichlorobenzene, crystal/flake	100-lb drum	Z	427.05	DR	A,N,F
00-174-1824	Insecticide, P-Dichlorobenzene, crystal GSA	1-lb can	J	3.22	LB	A,N,F
01-318-7415	Insecticide, Propetamphos, 50% (Catalyst)	(8) 3.2-oz bot	<b>J</b>	37.34	BX	A,N,F
01-104-0780	Insecticide, Pyrethrins, 3% pyrethrins with synergists, liquid (ULV fog concentrate)	1-gal bot	D	76.28	GL	A,N,F
00-459-2443	Insecticide, Pyrethrins, allethrin, d-phenothrin, or resmethrin, aerosol (PT 515 Wasp Feeze & Hornet Killer/Wasp Stopper II Plus/Wasp & Hornet Killer II)	(12) 12-oz cans	D	44.89	BX	A,N,F
00-823-7849	Insecticide, Pyrethrin, aerosol (PT 565 Plus XLO)	(12) 12-oz cans	D	118.40	BX	A,N,F
01-359-8533	Insecticide, Resmethrin (Scourge)	5-gal can	D	442.69	CN	A,N,F
01-457-6583	Insecticide, Spinosad, 11.6% (Sonserve SC)	1 gal cont	J	250.00	GL	A,N,F
01-424-3132	Insecticide, Temephos (Abate 4E)	2.5-gal cont	J	356.09	CO	A,N,F
12-308-4377	Molluscicide, NICLOS (Bayluscide 25 PROZ. EC) *** <b>RESTRICTED USE PESTICIDE</b> ***	50-kg drum	L	-----	DR	A,N,M
01-431-3352	Rodent Indicator Bait Blocks (Census Bait Blocks)	285 blocks	D	55.22	CO	A,N,F
00-089-4664	Rodenticidal Bait, Anticoagulant, 0.005% diphacinone	40 blocks	D	52.14	BX	A,N,F
00-753-4973	Rodenticidal Bait, Anticoagulant, 0.005-0.0055% diphacinone or 0.025-0.028% warfarin, pellets	5-lb can	D	9.16	CN	A,N,F
01-151-4884	Rodenticidal Bait, Anticoagulant, 0.005% bromadiolone (Maki), pellets	11-lb can	D	29.35	CN	A,N,F
01-426-4808	Rodenticidal Bait, Anticoagulant, 0.005% brodifacoum (Talon-G), pellets	11-lb can	<b>D</b>	38.17	CN	A,N,F
01-435-9320	Rodenticidal Bait, 2% zinc phosphide (ZP Rodent Bait) *** <b>RESTRICTED USE PESTICIDE</b> ***	(25) 7.5-g pkt	J	<b>52.56</b>	CO	N
00-753-4972	Rodenticide, Anticoagulant, concentrate 0.106% sodium salt of diphacinone (LIQUA-TOXII)	50 pouches	D	48.27	BX	A,N,F

01-435-9318	Rodenticide, 10% zinc phosphide (ZP Tracking Powder) ***RESTRICTED USE PESTICIDE***	(4) 500-g bot	J	22.00	BX	N
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+ User Code A=Army, N=Navy, F=Air Force, M=Marines SOS(RIC)=S9G

\*ACQUISITION ADVICE CODES (ACC)

D. DOD INTEGRATED MATERIAL MANAGER (IMM) STOCKED, AND ISSUED. Issue, transfer, or shipment is not subject to specialized controls other than those imposed by the Integrated Material Manager/Military Service supply policy.

1. The item is centrally managed, stocked, and issued.
2. Requisitions will be submitted in accordance with Military Service requisitioning procedures.

G. GENERAL SERVICES ADMINISTRATION (GSA) INTEGRATED MATERIAL MANAGED, STOCKED AND ISSUED. Identifies GSA managed items available from GSA Supply Distribution Facilities. Requisitions and fund citations will be submitted in accordance with GSA/Military Service requisitioning procedures.

H. CENTRAL CONTRACT - NOT STOCKED ITEM. Direct delivery under central contract #(non-stocked items) issue, transfer, or shipment is not subject to specialized controls other than those imposed by IMM/Service/Agency supply policy.

1. The item is centrally managed and procured.
2. Normal issue is by direct shipment from the vendor to the user at the order of the ICP or IMM. However, orders for quantities less than the vendors minimum order of quantity may be issued from stock by ICP or IMM supply distribution facilities.
3. Requisitions and fund citations will be submitted in accordance with IMM/Service/Agency requisitioning procedures.
4. Generally, delivery will be made within applicable Service/Agency guidelines addressing customer required time frame.

I. DIRECT ORDERING FROM A CENTRAL CONTRACT/SCHEDULE. Issue, transfer, or shipment is not subject to specialized controls other than those imposed by Integrated Material Manager/Military Service supply policy. The item is covered by a centrally issued contractual document, or by a multiple award Federal Supply schedule for GSA managed items, which permits using activities to place orders on vendors for direct delivery to the user.

J. NOT STOCKED, CONTROLLED PROCURED. Identifies IMM/Military Service centrally managed but not stocked items. Long lead times must be anticipated, since procurement will be initiated only after receipt of a requisition. Requisitions will be submitted in accordance with IMM/Military Service requisitioning procedures.

K. CENTRALLY STOCKED FOR OVERSEAS ONLY. Main means of supply is local purchase. Item is stocked in domestic supply system for those overseas activities unable to procure locally due to nonavailability of procurement sources or where local purchase is prohibited. Requisitions will be submitted by overseas activities in accordance with Service/Agency requisitioning procedures. NOTE: CONUS activities will obtain supply support through local procurement procedures.

L. LOCAL PURCHASE. IMM/Military Service managed items authorized for local purchase, as a normal means of support, by the Military Service, or base, post, camp, or station level. Items not stocked in wholesale distribution system of IMM/Military Service ICP. The local purchase forms authorized by the individual IMM/Military Service must be used. NOTE: GSA FSS items are included.

V. TERMINAL ITEM. Identifies items in stock; but future procurement is not authorized. Requisitions may continue to be submitted until stocks are exhausted. Preferred items National Stock Number (NSN) normally provided by the application of the phrase, "When Exhausted Use (NSN)". Requisitions will be submitted in accordance with IMM/Military Service requisitioning procedures as applicable.

X. SEMIACTIVE ITEM-NO REPLACEMENT a potentially inactive NSN which must be retained in the supply system as an item of supply because (1) stocks of the item are on hand or in use below the wholesale level and (2) the NSN is cited in equipment authorization documents TO&E, TA, TM, etc. or in-use assets are being reported.

1. Items are authorized for central procurement but not authorized for stockage at wholesale level.
2. Requisitions for in-use replacement will be authorized in accordance with individual Military Service directives.
3. Requisitions may be submitted as requirements generate. Repetitive demands may dictate at ACC change to permit Wholesale stockage.

Y. TERMINAL ITEM. Further identifies AAC V items on which wholesale stocks have been exhausted. Future procurement not authorized.

1. Requisitions will not be processed to the wholesale suppliers.
2. Internal Services' requisitioning may be continued in accordance with Military Service requisitioning policies.

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Z. INSURANCE/NUMERIC STOCKAGE OBJECTIVE ITEM. Items which may be required occasionally or intermittently and prudence requires that a nominal quantity of material be stocked due to the essentiality or the leadtime of the item.

1. The item is centrally managed, stocked and issued.
2. Requisitions will be submitted in accordance with IMM/Military Service requisitioning procedures.

## APPENDIX B

### ***COURSES FOR DOD PEST MANAGEMENT PERSONNEL***

If you see any information that needs to be corrected or updated, please contact Capt (Sel)Mauer, who can be reached at Tel: (301) 295-7479, DSN Prefix 295 or e-mail: [mauerdj@acq.osd.mil](mailto:mauerdj@acq.osd.mil)

#### **ARMY SPONSORED COURSES**

1. For information on the following courses, contact SSG McKinley, Academy of Health Sciences, U.S. Army, ATTN: MCCS-HPM, Fort Sam Houston, TX 78234-6100, Tel: (210) 221-6801/6733, DSN Prefix 471. Classes are conducted at Fort Sam Houston, TX.

Pest Management Certification Course (6H-F12/322-F12):

JUN 7 25, 1999

AUG 2 20, 1999

FEB 1 5, 1999

FEB 22 26, 1999

APR 19 23, 1999

SEP 13 17, 1999

Recertification (6H-F13/322-F13):

SEP 13 – 17, 1999

2. For information on courses in Germany, contact MAJ Tom Logan, HQ, USACHPPM-EUR, CMR 402, Box 137, APO AE 09180, Tel: 49-6371-86-8540/44, DSN: 486-8540/44. Classes are conducted at the USACHPPM-EUR, Landstuhl, Germany.

3. For information on courses taught at the Environmental Training Center, contact Ms. Gail Boeff, ATTN: ATZR-BT, Fort Sill, OK 73503-5100, Tel: (405) 351-2111, Fax: (405) 351-5722, DSN Prefix 639. The Environmental Training Center at Fort Sill, OK, conducts a variety of environmental, natural resources and occupational health courses.

#### **NAVY SPONSORED COURSES**

1. For information on the following courses, contact Mr. F. De Masi, NDVECC, Naval Air Station Jacksonville, Box 43, Jacksonville, FL 32212, Tel: (904) 772-2424, Fax: (904) 779-0107, DSN Prefix 942. Classes are conducted at the Disease Vector Ecology and Control Center, NAS Jacksonville, Jacksonville, FL.

Pesticide Applicator Training (Core) (B-322-1070), Instruction for Initial Certification:

SEP 13 – 20, 1999

Plant Pest and Vegetation Management (B-322-1071), Initial Certification for Categories 2, 3, 5 & 6:

SEP 21 – 24, 1999

Arthropod and Vertebrate Pest Management (B-322-1072), Initial Certification for Categories 7 & 8:

SEP 27 – OCT 6, 1999

NEHC CONF 1999

NOV 23, 1999

Operational Entomology Training (B-322-1077), designed for A/D & Reserve PMTs, EHOs, Entomologists, Epidemiologists & others assigned to PM units:

OCT 18 – 29, 1999

Medical Entomology and Pest Management Technology (Reserve Training) (B-322-1050):

JUN 7 – 18, 1999

JUL 12 – 23, 1999

2. For information on the following courses, contact HM1 Elam, NDVECC, 19950 Seventh Ave., NE, Ste. 201, Poulsbo, WA 98370-7405, Tel: (360) 315-4450, Fax: 4455, DSN Prefix 322. Classes are conducted at the Disease Vector Ecology and Control Center, Bangor, WA.

Medical Entomology and Pest Management Technology (Reserve Training) (B-322-1050):

JUN 21 – JUL 2, 1999

Pesticide Applicator Training (Core) (B-322-1070), Instruction for Initial Certification:

SEP 14 – 24, 1999

Plant Pest and Vegetation Management (B-322-1071), Initial Certification for Categories 2, 3, 5 & 6:

SEP 24 – 29, 1999

Arthropod and Vertebrate Pest Management (B-322-1072), Initial Certification for Categories 7 & 8:

SEP 30 – OCT 9, 1999

Recertification Course (B-322-1074), Category 8:

AUG 13 – 16, 1999

JUN 8 – 11, 1999

OCT 19 -22, 1999

Operational Entomology Training (B-322-1077), Recertification in DOD Category 8 is available as part of the course. Note: Reservists who have attended CIN: B-322-1050 and whose certification has not expired, may attend this course.

\*NEPMU-6, Pearl Harbor, Hawaii

Shipboard Pest Management (B-322-1075): NDVECC(B)

JUL 7, 1999

AUG 17, 1999\*

SEP 1, 1999

OCT 27, 1999

\* Ingleside, Texas



## **AIR FORCE SPONSORED COURSES**

1. For information on courses at Sheppard AFB, contact the Programs Division, 2AF/DOP, Keesler AFB, Mississippi 39534-5000, DSN: 597-1336. For information on course content, refer to AFCAT 36-2223, USAF Formal Schools or contact: Mr. Dale Hess, 366 TS/TSIM (Training Squadron/Training Squadron, Instructional Mechanical), 727 Missile Road, Sheppard AFB, Texas 76311-2254, DSN: 736-5790, Fax: 3345. Classes are conducted at Sheppard AFB, Texas.

2. For information on the following course, contact Capt Craig Forcum, USAF School of Aerospace Medicine, Brooks AFB, Texas 78235-5123, Tel: (210)536-2058/59, DSN Prefix 240, e-mail: [craig.forcum@mirage.brooks.af.mil](mailto:craig.forcum@mirage.brooks.af.mil)

Information is also available on the World Wide Web (WWW) at:

<http://wwwsam.brooks.af.mil/eh/entomolgy/usafento.html-ssi>

Operational Entomology Course (OEC) - #B30ZY43M3-000 is a two-week training course that includes vector bionomics and vector-borne disease profiles, surveillance and control of vectors and vector-borne diseases, and information, intelligence, and perspectives on developing country operations during exercises, hostilities, and natural disasters. Academic instruction, practical exercises and field experiences simulate actual vector-borne disease surveillance and control situations. The course is designed to provide training for the following Air Force specialties and DoD personnel: public health officers (43H1/3); public health apprentices (4E031, E-2 and above with completion of 5-level CDC and the recommendation of your supervisor), journeymen (4E051), craftsmen (4E071), or superintendents (4E091); medical entomologists (43M1/3); flight surgeons (48A1/3 or 48P1/3); pest management apprentices (3E433, E-2 and above with completion of 5-level CDC and the recommendation of your supervisor), journeymen (3E453), craftsmen (3E473), or superintendents (3E490 with a prior AFSC 3E433, 3E453, and 3E473), or equivalent civilian pest management personnel; and other military and civilian public health and pest management personnel with the consent of the faculty. Quotas are obtained through the Unit or MAJCOM Training Managers. Army and Navy personnel are encouraged to contact USAFSAM/PH to request attendance in OEC.

FEB 22 - 5 MAR 1999

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3. For information on the following course, contact Ms. June Brewer, 910 AW, YARS, Vienna, OH 44473-0910, Tel: (330) 609-1111/1178, Fax: (330) 609-1111, DSN Prefix 346. Information is also available on the WWW at: <http://w3.afrc.af.mil/units/910aw/spray/index.htm>

Aerial Application of Pesticides (Certification) - #AAP-01 is a one-week course that addresses the tenets and methodologies for aerial application of pesticides, with an emphasis on operational aspects and military applications.

The primary scope of the course includes general principles, legal aspects, contracts, map types and preparation, spray system calibrations, aerial spray math, DoD spray systems, meteorological effects, occupational health and safety, operations and mission support, disease control, pilot's view, private applicator's view, environmental aspects, computer modeling, swath and droplet characterization, pesticide monitoring, public relations, contingency wartime usage, spill prevention and containment, and other pertinent operational issues involving the use of aerial spray. The course features guest lecturers from the U.S. Army, U.S. Navy, U.S. Department of Agriculture, private applicator firms, and other government agencies. It is offered once annually in June.

JUN 7-11, 1999

## APPENDIX C

### ***DOD PEST MANAGEMENT MATERIEL, OTHER THAN PESTICIDES, LISTING***

**As of March 1, 1999**

#### **A. Disclaimer.**

1. The Pest Management Materiel List, Other Than Pesticides, paragraph C., below, does not constitute procurement authority for materiel listed herein. Use of trade names in this list is solely for the purpose of providing specified information to aid in the identification of specific products and does not imply endorsement of the products named or criticism of products not mentioned. Products mentioned in this list do not constitute a guarantee or warranty of these products by the Armed Forces Pest Management Board (AFPMB), the Military Departments, or the DOD.

2. Most of the pesticide dispersal equipment listed in paragraph C., below, should only be used by personnel (i.e. preventive medicine or installation pest control personnel) who have been formally trained and certified in accordance with DOD 4150.7-P, "The DOD Plan for the Certification of Pesticide Applicators, September 30, 1996 or DOD 4150.7-M, DOD Pest Management Training and Certification, April 24, 1997. All other personnel should not procure or use pesticide dispersal equipment unless specifically authorized by Service instructions, regulations, or directives.

3. This list is maintained, and periodically reviewed by the Armed Forces Pest Management Board's Pest Management Equipment Committee. Users are encouraged to submit notice of errors and additional information to the: Armed Forces Pest Management Board, ATTN: Contingency Liaison Officer, Forest Glen Section, WRAMC, Washington, DC 20307-5001.

#### **B. Purpose.**

The purpose of the Pest Management Materiel List, Other Than Pesticides, is to provide a descriptive reference of DOD standard available pest management equipment and materiel, other than pesticides.

#### **C. Pest Management Materiel, Other Than Pesticides Listing.**

1. Hand Sprayer, Pesticide, Manually Operated, Compressed Air. A manually carried piece of equipment that can discharge liquid pesticides by means of a hand-compressed pump in one, two, or three gallon capacities.

NSN 3740-	Item (Alternate Trade Name)	Cage Code	AAC*	Price	U/I	Users+
00-191-3677	Sprayer, Pesticide, Manually Carried, 1 gallon stainless tank, with pressure gauge. Formerly MIL-S-14102, replaced by CID A-A-55748. Flow rate - 0.8 l/min. Current inventory on hand does not include a spare parts package. Future purchases will include three sets of spare parts including: crack and crevice tip assemblies, nozzle gaskets and O rings, plunger cups, check valves, and strainer/filters.	58536	D	133.65	EA	A,N,F,M

00-641-4719	Sprayer, Pesticide, Manually Carried, 2 gallon stainless tank with pressure gauge. Formerly MIL-S-14102, replaced by CID A-A-55748. Flow rate - 0.8 l/min, includes three sets of spare parts including crack and crevice tip assemblies, nozzle gaskets and O rings, plunger cups, check valves, and strainer/filters.	58536	D	142.37	EA	A,N,F,M
00-720-0465	Sprayer, Pesticide, Manually Carried, Model Sureshot A-2600, 2 pt capacity, steel tank, no accessories included.	92997	G	<b>40.55</b>	EA	N,F
01-338-5390	Sprayer, Pesticide, Manually Carried, Whitmire System III Single Pack, Part Number 20-2300, includes pouch for three 28 oz pesticide product containers and a 10 foot memory coiled hose. Pesticides (28 oz product containers) must be ordered separately.	67184	D	90.10	EA	A,N,F,M
01-332-8746	Gauge, Sprayer, Pesticide. Part Number 803-311,. For retrofitting pressure gage on one and two gallon compressed air sprayers listed above.	29670	D	7.90	EA	A,N,F,M
4330-01-332-1639	Fluid Filter, Gauge, Pesticide Sprayer. Part Number 146-605. For retrofitting pressure gauge NSN (listed above) to one and two gallon compressed air sprayers listed above.	29670	D	3.11	EA	A,N,F,M

2. Duster, Pesticide, Manually Carried. Pest Control Equipment which disperses pesticide dust formulations via manually operated bellows, sifters or fans.

<b>NSN 3740-</b>	<b>Item (Alternate Trade Name)</b>	<b>Cage Code</b>	<b>AAC*</b>	<b>Price</b>	<b>U/I</b>	<b>Users+</b>
00-132-5935	Duster, Manually Carried, 5-10 lb tank capacity. FEDSPEC RR-D-780C. Manually operated rotary fan type; accessories include one straight discharge nozzle, two non-flexible straight extension tubes (14" long) and one curved non-flexible tube (10" long). Flow rate - 10-50 lbs/hr, and wt 8 lbs. Used to treat rodent burrows for ectoparasite control.	813498	Z	147.20	EA	A,N,F,M
00-132-5936	Duster, Manually Carried, Tubular Pump, 1lb tank capacity. CID A-A-55555. Designed to apply dusts for spot treatment indoors and outdoors. Flow rate - 10-50 lb/hr, and wt 2.03 lbs. May be used to apply pesticides and rodenticides in rodent burrows.	58536	D	31.95	EA	A,N,F,M
01-441-5250	Centro Bulb Duster, bulb duster, Part Number 27920 and 28140, consists of one 14oz bulb duster, with a straight metal nozzle, a 2 inch curved tip nozzle and a 12 inch extension with coupling.	9L921	J	31.04	KT	A,N,F,M

3. Sprayer and Duster, Pesticide, Manually Carried, Backpack. Designed to discharge either liquid or solid pesticides, under pressure, dispersed by means of a blower. Liquid particle discharge size is 50 to 100 microns. Tank/hopper size is variable.

NSN 3740-	Item (Alternate Trade Name)	Cage Code	AAC*	Price	U/I	Users+
01-463-0147	Sprayer-Duster, Pesticide, Backpack, STIHL Model SR-400, gasoline engine driven, includes granular spreader, ULV nozzle, and field parts kit. Tank size – 3.5 gal, 24.6" high X 18.9" wide X 11" deep, 24 lbs empty wt	9Z575	D	570.32	EA	A,N,F,M
01-157-4000	Sprayer-Duster, Pesticide, Backpack, Solo Model 423, gasoline engine driven, 5 horsepower, 1.6 quart fuel tank, includes dusting attachment and set of dosage pieces, three gallon pesticide tank. Discharges mist 33 ft horizontally, and 25 ft vertically. 27" high X 18" wide X 12" deep, weighs 25 lbs empty. Note: Echo Model DM9, formerly listed under this NSN is no longer available for procurement.	8T480	D	585.06	EA	A,N,F,M

4. Sprayer, Hydraulic or Electric, Mist or Solid Stream, Pesticide, Push Cart Mounted. A portable or push cart mounted unit designed to disperse liquid pesticides as mists (50 to 100 microns) and solid streams by means of a gasoline engine driven or electrically driven pump.

NSN 3740-	Item (Alternate Trade Name)	Cage Code	AAC*	Price	U/I	Users+
01-019-4557	Sprayer, Pesticide, Pushcart Mounted, electric motor driven, 120V AC, Model Space III or CID A-A-52286, primarily used to control stored product pests. Mist, fine spray output - 0.5 to 3.5 oz per min, 5 gallon pesticide tank, operating pressure 4 PSIG, wt 176 lbs, shipping wt. 310 lbs.	58536	Z	4919.62	EA	A,N,F,M

5. Sprayer, Hydraulic or Electric, Mist or Solid Stream, Pesticide. A skid or frame mounted unit designed to disperse liquid pesticides as mists (50 to 100 microns) and solid streams by means of a gasoline engine driven or electrically driven pump.

NSN 3740-	Item (Alternate Trade Name)	Cage Code	AAC*	Price	U/I	Users+
00-772-0090	Sprayer, Pesticide, Frame Mounted, mist and solid stream, gasoline engine driven, MIL-S-12511, 42" lg X 26" wi X 30" hi, wt 174 lbs., 50 ft hose (0.375 inch internal diameter, and oil resistant), 5 horsepower engine, piston driven pump, 3GPM discharge rate, pressure gage, spray gun, discharge control valve, and two discharge hoses included. Pesticide tank not included.	82554	C	2307.62	EA	A,F

NSN 3740-	Item (Alternate Trade Name)	Cage Code	AAC*	Price	U/I	Users+
00-916-6462	Sprayer, Pesticide, Frame Mounted, mist and solid stream, gasoline engine driven, Part No. 47500, 42" lg X 26" wi X 30" hi, wt 174 lbs., 50 ft hose (0.375 inch internal diameter, and oil resistant), 1.5 horsepower engine, piston driven pump, 3GPM discharge rate, pressure gage, spray gun, discharge control valve, and two discharge hoses included. Pesticide tank not included.	82554	C	2307.62	EA	A,F
00-993-4000	Sprayer, Pesticide, Frame Mounted, .mist and solid stream, Part No CSR47500A , 42" lg X 26" wi X 30" hi, wt 174 lbs., 50 ft hose, (0.375 inch internal diameter, and non-oil resistant), 4.0 horsepower engine, piston driven pump, pressure gage, spray gun, discharge control valve, and one discharge hoses included. 3 GPM discharge rate. Pesticide tank not included.	82254 81349	C	2307.62	EA	A
01-053-0127	Sprayer, Pesticide, Skid Mounted. FMC Model DM10E200SRK, Part No. 5268191. Modular constructed sprayer with a 200 gallon tank.	50492	J	7726.07	EA	A
01-211-7226	Sprayer, Pesticide, Frame, Mounted, gasoline engine driven, MIL-S-12511, Pumping Systems, Columbia MD, Part Number P604S, 51" X 15" X 19", wt 100 lbs. Flow rate - 3GPM at 300 PSI operating pressure. Pesticide tank not included.	81349	C	995.00	EA	A
01-454-1981	Pesticide Sprayer, Electric, Liquid (SPEL), AG 25 Sprayer, battery/electric, solid stream sprayer, 25 gal plastic tank, 15 ft hose, .0375 in inside diameter hose, wt. 25.6 lbs, L 29 1/2" x W 20"x Ht16."	03JL1	J	308.00	EA	A,N,F,M

6. Sprayer, Hydraulic or Electric, Mist or Solid Stream, Pesticide, Trailer Mounted. A trailer mounted unit designed to disperse liquid pesticides as mists (50 to 100 microns) and solid streams by means of a gasoline engine driven or electrically driven pump.

NSN 3740-	Item (Alternate Trade Name)	Cage Code	AAC*	Price	U/I	Users+
00-166-2910	Sprayer, Roto Mist, Fine Spray, 4 Wheel Trailer Mounted, FMC Model 303T, blower diameter 40 inches, air volume 60000 CFM, air volume 95 MPH, blower rpm 2200, pump capacity 20 GPM, pump pressure 0-400 lbs, 300 gallon tank.	06350	L	8430.00	EA	A,F
00-901-0720	Sprayer and Duster, Pesticide, Trailer Mounted, gasoline engine driven, MIL-S-23923D, Type A, 10 gallons or 100 lb tank capacity, 10 horsepower, 2 wheel, pneumatic, rubber tire trailer, mist sprayer, 10000 CFM discharge rate at 150 MPH.	81349	D	18128.40	EA	A,N,F
00-925-9594	Sprayer, Pesticide, Trailer Mounted, gasoline engine driven, MIL-S-82068, size B, 500 gallon tank, flow rate - 25 GPM at 700 PSI, 168" X 75" X 80", wt 1800 lbs, 18 horsepower, 2 wheel, pneumatic, rubber tire trailer, mist and solid stream, piston pump, includes 2 spray guns, 200 feet of 0.50 inch diameter, abrasion and weather resistant hose.	81349	Z	17068.86	EA	A,N,F

00-925-9598	Sprayer, Pesticide, Trailer Mounted, gasoline engine driven, MIL-S-82068C, size C, 200 gal steel tank, 5.75 horsepower, 2 wheel, pneumatic, rubber tire trailer, mist and solid stream, 1 discharge nozzle, piston pump, flow rate - 10 GPM discharge rate at 425 PSI, 100 foot 0.50 inch inside diameter, abrasion and weather resistant hose.	81349	J	9266.76	EA	A,N,F
01-026-9162	Sprayer, Pesticide, Trailer Mounted, gasoline engine driven, Smithco Part No 7830-MH, 200 gallon, fiber glass tank, wt 825 lbs. Flow rate - 10 GPM at 425 psi, 5.75 horsepower, 2 wheel, pneumatic, rubber tire trailer, mist and solid stream, piston pump, 100 foot, 0.05 inch inside diameter, abrasion and weather resistant hose.	61684	Z	3882.87	EA	A,F
01-413-9095	Sprayer, Pesticide, Trailer Mounted, gasoline engine driven, FIMCO Part No TTS250, 200 gallon polyethylene tank, flow rate - 16 to18 GPM at 30 to50 PSI, 5 horsepower, 8 roller pump, 2 wheel, pneumatic tire trailer, 100 foot hose, high pressure, 3/8" inside diameter hose and Model 43H, trigger, aluminum handgun.	1B437	J	3351.55	EA	A,N,F

7. Sprayer, Pesticide, Fog/Aerosol Generator (ULV/ULD), Manually Carried. A manually carried unit designed to disperse liquid pesticides under pressure by means of gasoline engine driven or electrically driven pump and/or blower. Generates liquid particles in the size range of 0.1 to 50 microns. Excludes sprayers having a dust dispersal attachment. May have a combustion chamber for heating air.

NSN 3740-	Item (Alternate Trade Name)	Cage Code	AAC*	Price	U/I	Users+
00-818-6648	Fog Generator, Manually Carried, gasoline engine driven, thermal fog, Curtis Dyna Model 2610 Golden Eagle. Provides indoor/outdoor thermal fog for mosquito and fly control, 52" X 9.5" X 25.5", wt 19 lbs., 1 gallon pesticide tank. Flow rate - 5 GPH at 6 psi, adjustable shoulder strap included.	82254	Z	1034.78	EA	A
01-206-9636	Sprayer, Manually Carried, DC (rechargeable battery), Ulva Fan, Dram Model MK2, Ultra Low Volume. Flow rate - 60 ml/min at 3 PSIG, 0.5 liter plastic pesticide reservoir, wt 3.25 lbs with out battery.	0C9M7	D	373.44	EA	A,N,F,M
01-456-2625	Fogger, Hand Held, gasoline engine driven, ULV, London Fog Eliminator, PN# 8100, 25" long X 20 1/2" high X 10 1/2" wide, 24 lbs empty wt. Normal dry fog rate is 5-6 gph.	56215	J	1045.00	EA	A,N,F,M
01-456-2622	Fogger, Hand Held, gasoline engine driven, ULV, London Aire Colt . PN# 8675, 14" long X 11" wide X 12" high, 19 lbs empty wt. Flow rate - 0-4 oz per minute.	56215	J	1495.00	EA	A,N,F,M
01-456-2623	Fogger, Hand Held, gasoline engine driven, ULV, Clarke P-1, PN# L7800-001, 17 lbs empty wt.	65183	J	1400.00	EA	A,N,F,M



8. Sprayer, Pesticide, Fog/Aerosol Generator (ULV/ULD), pushcart Mounted. A push cart mounted unit designed to disperse liquid pesticides under pressure by means of gasoline engine driven or electrically driven pump and/or blower. Generates liquid particles in the size range of 0.1 to 50 microns. Excludes sprayers having a dust dispersal attachment. May have a combustion chamber for heating air.

NSN 3740-	Item (Alternate Trade Name)	Cage Code	AAC*	Price	U/I	Users+
01-019-4557	Sprayer, Pesticide, Pushcart Mounted, CID A-A-5286, Micro-Gen Model SpaceIII, electric powered, 120 volt, 60 Hz, 3 phase motor, 1 horsepower, 4 wheel hand pushed, 48" X 24" X 42", 5 gallon tank, wt 176 lbs.	58536 52987	Z	4919.62	EA	A,N,F,M
01-118-5962	Aerosol Generator, Pesticide, Pushcart Mounted, Model QA1052, gasoline engine driven, 1 quart tank, flow rate - 0.5 to 5 oz per minute, 36" X 24" X 36", wt 60 lbs.	19207	L	5400.00	EA	A

9. Sprayer, pesticide, fog/aerosol generator (ULV/ULD), skid mounted. A skid mounted unit designed to disperse liquid pesticides under pressure by means of gasoline engine driven or electrically driven pump and/or blower. Generates liquid particles in the size range of 0.1 to 50 microns. Excludes sprayers having a dust dispersal attachment. May have a combustion chamber for heating air.

NSN 3740-	Item (Alternate Trade Name)	Cage Code	AAC*	Price	U/I	Users+
00-375-9154	Fog Generator, Skid Mounted, gasoline engine driven, Grizzly PDS, 53" lg X 31" wi X 37" ht, wt 456 lb empty, 18 horsepower engine, positive displacement blower w/6 psi max pressure, 5 gallon polystyrene pesticide tank.	24885	J	2490.24	EA	A,N,F,M
01-206-9635	Sprayer, Pesticide, Skid Mounted, Beecomist Model Pro Mist 15MP, ULV, DC driven, wt 95 lb, includes vehicle wiring installation kit (PN A4006), vinyl cover (PN AE550), and 12 volt battery.	65387	J	8042.18	EA	N,F,M
01-445-8380	AGULVE, Sprayer, Pesticide, Skid Mounted, Beecomist Model Pro Mist 15MP with an aluminum frame, ULV, DC driven, wt 95 lb, includes vehicle wiring installation kit (PN A4006), and repair parts kit (PN A0532.2)	19204 & 65387	J	7638.00	EA	A,N,F,M
01-141-2557	Aerosol Generator, Pesticide Skid Mounted, Curtis Dyna Model 2740 Series II, 15 gallon tank, 48" X 41" X 35", wt 495 lbs	82254	D	4943.06	EA	A,F,M

10. Sprayer, Pesticide, Aerial Application Unit, Liquid or Dry Pesticide. Designed for use with rotary wing aircraft. Units may be electric or gasoline engine driven and internally or externally mounted. Units may be equipped with booms.

NSN 3740-	Item (Alternate Trade Name)	Cage Code	AAC*	Price	U/I	Users+
01-206-9614	Dispersal Unit, Insecticide, Model PAU-9/A. Unit is currently restricted to internal mounting in a UH1H helicopter airframe.	65388	Y	18122.90	EA	N,M
01-262-8707	Pesticide Dispersal Unit (PDU), Multicapacity, Part No 96800, helicopter slung, low volume liquid spray system, ULV Spray System and Solid (Granular) Dispersal System, 150 gallon tank capacity.	52905	Z	87298294	EA	A

11. Trap, Insect, to include light traps and insect bait boxes.

NSN 3740-	Item (Alternate Trade Name)	Cage Code	AAC*	Price	U/I	Users+
00-134-9229	Trap, Insect, Portable, Battery Operated, Hausherr's Model CDC, battery operated, cylindrical, w/14.5 inch diameter aluminum cover.	30286	L	82.93	EA	A,N,F
00-607-0337	Trap, Mosquito Light, New Jersey. Used to collect mosquitoes where 110V power source is available. 14" X 9.5", wt 9.5 lbs., weather proof time clock included.	30286	D	255.60	EA	A,N,F,M
01-106-0091	Trap, Solid State Army Miniature (SSAM), Hock Model O-341. Used for mosquito surveillance, portable, powered by either D cell or rechargeable 6 volt gel cell batteries. Wt 3 lbs. w/o batteries. For D-cell non-rechargeable alkaline batteries, order 6135-00-835-7210 or 6135-00-930-0030. For gel-cel rechargeable batteries, order 6140-00-432-0490. For a battery charger to recharge gel-cel batteries, order 6130-00-629-7396.	6T654	L	116.39	EA	A,N,F,M

12. Trap, animal. A device snap/set/glue used to capture animals.

NSN 3740-	Item (Alternate Trade Name)	Cage Code	AAC*	Price	U/I	Users+
00-177-1892	Trap, Gopher, Portable. McCabe - Gopher Trap, 6" overall length, wt 3 oz.	51374	L		EA	F
00-252-3384	Mouse Trap, Spring, Model CANTMISS OR GGG-M-550, WD base, w/4 way release, 4" X 2" X 0.5."	98878	G	5.23	DZ	A,N,F,M
00-260-1398	Rat Trap, Spring, CAN'T MISS RATTRAP, 7" x 3" x 0.5."	98878	G	16.99	DZ	A,N,F,M
00-260-1401	Trap, Cage, Animal, Portable, Collapsible, Part No, 206, 27" X 9" X 9", wt. 7 lbs.	23907	L	-----	EA	A
01-095-1738	Trap, Cage, Animal, Woodstream Model 1045, galvanized steel, 36" X 11" X 11", wt 16.5 lbs.	84155	D	61.59	EA	F,N
NSN 3740-	Item (Alternate Trade Name)	Cage Code	AAC*	Price	U/I	Users+
01-096-1632	Trap, Insect, Sticky Trap, Roach, .box of 24 traps, 5" X 3.5" X 2,"		D	64.71	BX	A,N,F,M
01-240-	Trap, Rodent, Glue, Woodstream Model M-319 (Holdfast),	84155	D	21.76	BX	A,N,F,M

6170	9" X 9" X 4", wt 1 lb, 24 traps per box.					
01-371-6770	Mousetrap, Spring, Part No 81820, expanded trigger.	40850	J	2.19	EA	F
01-412-9363	Indoor Fly Catcher Traps, Part number 445 or M500, cylindrical sticky fly trap, 12 per box.	27633 84155	H	43.07	BX	A,F
01-412-9371	Insect Fly Catcher, Part Number M510, 144 sticky paper strip rolls per box.	84155	H	153.08	BX	A,N,M
01-420-9038	Insecticide, Glue, Part Number 101, four 1 gal containers per box. Used to rodent glue boards.	27633	D	156.85	BX	A,N,F,M
01-423-2471	Pole, Animal Restraint, Part No 81506,	7D560	D	124.96	EA	A,N,F,M
01-431-1186	Trap, Rodent, Mechanical, Aluminum, Sherman Model LFAHD, Box of 30 traps with 5 spare curved wires and 5 spare straight wires for linking sides and bases.	0TT47	L	418.15	BX	A,N,F,M

### 13. Rodent Bait Stations. Tamper proof devices used to hold rodent bait.

<b>NSN 3740-</b>	<b>Item (Alternate Trade Name)</b>	<b>Cage Code</b>	<b>AAC*</b>	<b>Price</b>	<b>U/I</b>	<b>Users+</b>
01-423-0737	Container, Rodent Bait, Plastic, Tamper Proof, capable of dispensing solid or granular bait, Part No 05830, 6 bait stations per box.	9L921	Z	72.33	BX	A,N,F,M

### 14. Spreader, Granular. A manually-carried or push cart/trailer-mounted unit designed to disperse granular pesticides, fertilizers, and seeds.

<b>NSN 3750-</b>	<b>Item (Alternate Trade Name)</b>	<b>Cage Code</b>	<b>AAC*</b>	<b>Price</b>	<b>U/I</b>	<b>Users+</b>
00-903-3734	Spreader, Loose Material, Manual, Rotating Disc, Model Cyclone 4T06-6T08, 8' maximum spread path width. 40" X 20" X 20", weight 140 lbs.	18654	L	22.46	EA	A,F
00-929-5120	Spreader, Loose Material, Manual, Gravity spread, Part No 603, 3' maximum spread path width. 43" X 25" X 12", wt 123 lbs.	25616	L	_____	EA	F
00-965-0043	Spreader, Loose Material, Towed, Rotating Disc, Part No 111, 56' maximum spread path width.	00229	Y	685.00	EA	F
00-729-6897	Spreader, Loose Material, Manual, Hand Crank, Rotating Disc, Part No PCB or 75, 12' maximum spread path width, 10.5" X 9", wt 5.5 lbs.	84945 86951	I	127.40	EA	A,F
00-269-6028	Spreader, Loose Material, Manual, Gravity spread, Rotating Disc, Model Gandy Line Tender 901-3JRKL, 1.75' maximum spread path width. 36" X 36" X 42", wt 124 lbs.	89055	L	_____	EA	F

### 15. Pheromone Traps, stored products. Includes, traps, pheromones and accessories used to monitor stored product pests.

<b>NSN 3740-</b>	<b>Item (Alternate Trade Name)</b>	<b>Cage Code</b>	<b>AAC*</b>	<b>Price</b>	<b>U/I</b>	<b>Users+</b>
01-414-8117	Insect Wing Trap Kit, Pheromone, Trece' 1C Trap Kit (3 traps, 3 sticky liners, 6 lures, 2 part number 5653-13	02RG7	J	67.58	BG	A,N,F,M
01-414-8118	Indian Meal Moth Lures, Part Number 3153-25, 25 lures per bag.	02RG7	J	67.58	BG	A,N,F,M
01-414-	Confused and Red Flour Beetle Lures, Part Number 3156-	02RG7	J	66.43	BG	A,N,F,M

8123	25, 25 lures per bag.					
01-414-8124	Khapra and warehouse beetle Lures, Part Number 3155-25, 25 lures per bag.	02RG7	J	50.00	BG	A,N,F,M
01-414-9391	Inrtsect Monitoring Kit, part 3565-05, for Kapra and Warehouse beetles, 5 traps, 5 lures and food oil attractant.	02RG7	J	25.56	KT	A,N,F,M
01-414-9393	Insect Monitoring Kit, Trece Storgard FLIT-TRAK M2 for red and confused flour beetles, part 3566-05, 5 traps, 5 lures, and food oil attractant.	02RG7	J	30.48	KT	A,N,F,M
01-414-9395	Insect Monitoring Kit, Trece Storgard FLIT-TRAK M2 for sawtoothed grain and merchant grain beetles, part 3567-05, 5 trap stations and food oil attractant.	02RG7	J	25.06	KT	A,N,F,M
01-414-9397	Cigarette Beetle Lure, Trece Wing Trap Lure for cigarette beetle, part 3162-25, 25 lures per bag.	02RG7	J	67.75	BG	A,N,F,M
01-414-9399	Lesser Grain Borer Lure, Trece Wing Trap Lure for lesser grain borer, part 3158-25, 25 lures per bag.	02RG7	J	61.01	BG	A,N,F,M
01-418-5107	Insect Monitor, Stored Product Pest Part Number 3302-00, 100 traps per box	02RG7	J	191.06	BX	A,N,F
01-418-5110	Insect Monitor, Stored Product Pest, Part Number 3303-25, 25 per box.	02RG7	J	50.77	BX	A,N,F
01-418-1927	Insect Monitoring Kit, Stored Product Pest, Part Number 121901, 100 wing traps per box.	0XAA8	H	152.25	BX	A,N,F,M
01-418-1929	Indian Meal Moth Lures, Part Number 1225114, 100 per bag.	0XAA8	H	30.00	BG	A,N,F

## 16. Bird Pest Management Devices.

NSN 3740-	Item (Alternate Trade Name)	Cage Code	AAC*	Price	U/I	Users+
00-076-3541	Gun, Scareaway, Zonmark II. Used to scare birds and other pests away from specific areas. Powered by propane gas (propane tank not included), 36" X 12" X 7," wt 20 lbs.	5G078	L	-----	EA	F
01-037-9325	Gun Scareaway, Dana Model AO-86M-3. Used to scare birds and other pests away from specific areas. Powered by propane gas (propane tank not included) , 36" X 12" X 8," wt 30 lbs.	55726	J	315.35	EA	F

## 17. Miscellaneous.

NSN 3740-	Item (Alternate Trade Name)	Cage Code	AAC*	Price	U/I	Users+
00-252-3383	Swatter, Fly, Model Plasti-Swat 51, 18"lg X 4"w X 0.5," wt 5 oz., 12 per package.	54749	G	2.94	PG	A,N,F,M
01-210-2368	Aspirator, 1.5v (2 -D Cell battery) powered, &" X 3.5" X 2," wt 8 oz w/o batteries.	30286	L	45.84	EA	A,N,F,M
01-454-1982	Stake, Flag, Orange, pn 101066, 2 ½" X 3 ½" Orange vinyl flag, 30" wire length.	51985	J	9.62	PG	A,N,F,M
01-454-	Holder, Carrier, Stake, Flag, pn 101124, heavy duty green,	51985	J	7.75	EA	A,N,F,M

1984	cotton duct shoulder bag with shoulder strap.					
01-454-1987	Scales, Spring, Pesola, 100 gram, PN# 277502, 22 cm long X 5 cm wide w/internal spring, 0.3 lb.	51985	J	39.95	EA	A,N,F,M
01-454-1989	Scales, Spring, Pesola, 500 gram, PN# 277506, 28 cm long X 5 cm wide w/internal spring, 0.3 lb.	51985	J	39.95	EA	A,N,F,M
01-454-2256	Aspirator, Oral, Entomology Specimen Collection, WHO aspirator, Straight plexiglass 10 " tube, plastic coupler w/nylon screen, 2 ft rubber tube w/mouthpiece.	13873	J	3.50	EA	A,N,F,M
01-454-2341	Dipper, Entomological, PN# 1132, 5" diameter white plastic cup, pour spouts, graduated measurements in English and metric, w/36" wooden extension handle.	59590	J	10.70	EA	A,N,F,M
01-454-2344	Point Punch, Entomology Specimen, 6" long X 3/4" high X 3" wide, metal punch with spring expanded handle, wt. 0.4 lbs.	59590	J	33.50	EA	A,N,F,M
01-454-2345	Breeder, Mosquito, 8 3/4" high X 4 7/8" diameter, consists of two clear quart sized containers, a plastic lid between two sections contains a vinyl funnel through which the emerging adult mosquitoes fly into the upper section.	59590	J	11.35	EA	A,N,F,M
01-454-2348	Tray, Mosquito Larval Sorter, bright white polyethylene tray, 10" wide X 13 1/2" long X 1 1/4" deep.	59590	J	9.50	EA	A,N,F,M
01-454-2354	Vials, Collection, Entomology Specimen, 6 dram w/polyseal cap, 23 mm diameter, 85 mm length.	59590	J	5.40	DZ	A,N,F,M
01-456-2530	Block, Insect Pinning, 1" wide X 3" long, cut to three levels, provides correct label and specimen height on insect pins.	59590	J	1.75	EA	A,N,F,M
6530 01-451-5144	Light, UV, Hand Held, w/replacement bulb (NSN 6210-01-449-3170). 2" X 4" X 8" plastic lamp w/ wrist strap, operates with 4AA batteries, wt. 1.5 lbs.	0USV5	L	----	EA	A,N,F,M

## 18. Sets and Kits.

NSN	Item (Alternate Trade Name)	Cage Code	AAC*	Price	U/I	Users+
3740 00-952-2180	Trap, Rodent. Model 9-552-180, 18" X 15" X 15", wt 40 lbs.		D	306.07	SE	A,N,F,M
3740 00-148-7639	Insect Control Set, Part No. MC06250.7. C/O dusters, insecticides, protective clothing and related equipment identified in Marine Corps Stock List SI-3-07705A.	80372	D	3388.35	SE	M

<b>NSN 3740-</b>	<b>Item (Alternate Trade Name)</b>	<b>Cage Code</b>	<b>AAC*</b>	<b>Price</b>	<b>U/I</b>	<b>Users+</b>
6545 00-952- 2175	Rodent Survey Kit,. Used to survey for rodents. 30" X 25" X 20", wt 170 lbs		D	2241.77	SE	A,N,F,M
6545 00-952- 2178	Rodent Survey Kit. Used to survey for rodents. 30" X 18" X 16", wt 118 lbs.		D	<b>1962.70</b>	SE	A,N,F,M
6545 00-982- 4121	Entomological Collecting Kit, Field, 30" X 24" X 15" , wt 90 lbs.		D	5120.13	EA	A,N,F

### 19. Personal Protection Materiel.

<b>NSN</b>	<b>Item (Alternate Trade Name)</b>	<b>Cage Code</b>	<b>AAC*</b>	<b>Price</b>	<b>U/I</b>	<b>Users+</b>
7210- 00-266- 9736	Insect Net Protector, Field Type, MIL -I-10901, 200" X 68", wt 11lb. Used to protect personnel from insects while sleeping. Mildew resistant nylon fabric.	81349	D	26.20	EA	A,N,F,M
7210 00-267- 5641	Pole, Folding Cot, Insect Net Protector. Four 30" X 1" wood poles, wt 1 lb, used to suspend Insect Net protector, Field Type (listed above) from military cots. MIL-P-17662.	81349	D	3.85	SE	A,N,F,M
7210 00-300- 6950	Clamp, Insect Net Protector Rod. Used to Attach Insect Bar, Rod s (listed below) to military cots. CID A-A-55099. Requires to clamps to attach Rods and erect the Insect Net Protector.	58536	D	2.55	EA	A,N,F
7210 00-359- 4850	Rod, Insect Net Protector. Two T-shaped metal rods, used to suspend the Insect Bar, Field Type. Rods may be pushed into the ground. Rods do not fit into military cots, use Insect Bar, Clamp (listed above). CID A-A-55099. Two Rods, Insect Net Protector are required to erect a Insect Net Protector.	58536	D	6.20	EA	A,N,F
7210 01-364- 2198	Insect Net Protector, MIL-I-82265COT, Includes 7210-00-266-9740 Insect Net Protector 1; 7210-00-2667-5641, Pole, Folding Cot Insect Net Protector.	81349	D	21.00	KT	N
7210 01-364- 2197	Insect Net Protector, MIL-I-10901FIELD. Includes 7210-00-266-9763, Insect Net Protector1, 7210-00-359-4850, Rod, Insect Net Protector, 7210-00-300-6950, Clamp, Insect Net Protector.	81349	D	25.00	KT	<b>N,F,M</b>
7210 00-266- 9470	Insect Net Protector 1, MIL-I-82265, 27"X77.5," Used to protect personnel from insects while sleeping, for use with military cots.	81349	D	25.15	EA	N
8415 00-935- 3130	Insect Bar, Head Net. Used to protect head and neck from mosquitoes. 30" X 20," wt 1 lb. MIL-I-11489.	81349	D	4.95	EA	A,N,F,M
8415 00-935- 2914	Insect Net, Hat. CID A-A-43746. Nylon Netting, AG323, Elastic Headware Attachment.	58536	D	0.35	EA	A,N,F
8415 01-192- 2357	Insect Net, Mittens. MIL-S-37205. Head and hand covering; nylon; black; packaged in heat-sealed, waterproof bag. A component of Survival Kit, Individual, NSN 6545-00-139-3671, but may be ordered separately.	0XU64	D	7.88	EA	A,N,F

NSN 3740-	Item (Alternate Trade Name)	Cage Code	AAC*	Price	U/I	Users+
8415 01-035- 0846	Parka, Insect Repellent. Issued with a two oz tube of 75% DEET Repellent, NSN 6840-00-753-4963, Size - Small. IWt 1 lb, MIL-J-87024.	81349	D	15.95	EA	N,F,M
8415 01-035- 0847	Parka, Insect Repellent. Issued with a two oz tube of 75% DEET Repellent, NSN 6840-00-753-4963, Size - Medium, Wt 1 lb.	81349	D	15.95	EA	N,F,M
8415 01-035- 0848	Parka, Insect Repellent. Issued with a two oz tube of 75% DEET Repellent, NSN 6840-00-753-4963, Size - Large, Wt. 1 lb.	81349	D	15.95	EA	N,F,M

20. Devices for Electrocution of Flying Insects, Reference Armed Forces Pest Management Board Technical Information Memorandum (TIM) No. 25, August 1988, for information on appropriate uses. See paragraph F.3., below to obtain either electronic or hard copies of TIM 25.

NSN 3740-	Item (Alternate Trade Name)	Cage Code	AAC*	Price	U/I	Users+
01-286-2361	Wall Mount, 80W, Type I and Class A, PN # CID	58536	D	220.75	EA	A,N,F,M
01-286-2362	Wall Mount, 40W, Type I and Class B	58536	D	170.68	EA	A,N,F,M
01-286-2363	Ceiling Mount, 80W, Type II and Class A	58536	Z	259.52	EA	A,N,F,M
01-286-2364	Corner Mount, 80W, Type III and Class A	58536	Z	234.50	EA	A,N,F,M
01-287-1036	Ceiling Mount, 40W, Type II and Class B	58536	J	340.79	EA	A,N,F,M

## D. Emergency Procurement of Pesticides and Pest Management Equipment.

### \*ACQUISITION ADVICE CODES (ACC)

Code D. DOD INTEGRATED MATERIAL MANAGER (IMM) STOCKED, AND ISSUED. Issue, transfer, or shipment is not subject to specialized controls other than those imposed by the Integrated Material Manager/Military Service supply policy.

1. The item is centrally managed, stocked, and issued.
2. Requisitions will be submitted in accordance with Military Service requisitioning procedures.

Code H. CENTRAL CONTRACT - NOT STOCKED ITEM. Direct delivery under central contract # (non-stocked items) issue, transfer, or shipment is not subject to specialized controls other than those imposed by IMM/Service/Agency supply policy.

1. The item is centrally managed and procured.
2. Normal issue is by direct shipment from the vendor to the user at the order of the ICP or IMM. However, orders for quantities less than the vendor's minimum order of quantity may be issued from stock by ICP or IMM supply distribution facilities.
3. Requisitions and fund citations will be submitted in accordance with IMM/Service/Agency requisitioning procedures.
4. Generally, delivery will be made within applicable Service/Agency guidelines addressing customer required delivery time frame.



Code J. NOT STOCKED, CONTROLLED PROCURED. Identifies IMM/Military Service centrally managed but not stocked items. Long lead times must be anticipated, since procurement will be initiated only after receipt of a requisition. Requisitions will be submitted in accordance with IMM/Military Service requisitioning procedures.

Code L. LOCAL PURCHASE. IMM/Military Service managed items authorized for local purchase, as a normal means of support, by the Military Service, or base, post, camp, or station level. Items not stocked in wholesale distribution system of IMM/Military Service ICP. The local purchase forms authorized by the individual IMM/Military Service must be used. NOTE: GSA FSS items are included.

### **E. Emergency Requisition Procedures.**

1. Deploying and/or deployed forces often need pesticides and pest management equipment on short notice. The Defense Logistics Agency has established Emergency Supply Operations Centers (ESOCs) to help meet these needs.
2. For emergency procurement of pesticides, including repellents and pest management equipment, including pesticide application equipment, and respirators: Contact the Defense Supply Center Richmond (DSCR) Emergency Supply Operations Center (ESOC) at DSN 695-4865 [commercial (804) 279-4865]. This ESOC is staffed 24 hours, 7 days per week.
3. For technical logistical inquiries, contact the DSCR Chemist at DSN 695-3995 or commercial at (804) 279-3995 during normal duty hours (0730-1600 hrs eastern standard time) or via pager number 1-800-759-8888, PIN number 8953419#, which is available 24 hours, 7 days per week.
4. For personal protection equipment (bednets, head nets, etc.): Contact the Defense Supply Center Philadelphia ESOC Customer Assistance Branch at DSN 444-3042/3043 or Commercial at (215) 737-3041. The Philadelphia ESOC is staffed 0630-1700 hours Monday through Friday, eastern standard time.

### **F. Armed Forces Pest Management Board (AFPMB) Technical Information Memorandum (TIM) 24, "Contingency Pest Management Pocket Guide"**

1. This TIM is intended for field use during exercises and contingency operations by deployed forces. The purpose of TIM 24 is to provide basic information on using pesticides and pest management equipment to control disease vectors and pests during field situations worldwide.
2. Most of the pesticide dispersal equipment listed in paragraph C., above, should only be used by personnel (i.e. preventive medicine or installation pest control personnel) who have been formally trained and certified in accordance with DOD 4150.7-P, "The DOD Plan for the Certification of Pesticide Applicators, September 30, 1996 or DOD 4150.7-M, "DOD Pest Management Training and Certification, April 24, 1997. All other personnel should not procure or use pesticide dispersal equipment unless specifically authorized by Service instructions, regulations, or directives.
3. You may obtain copies of TIM 24 and other AFPMB publications by writing to: The AFPMB, ATTN: Contingency Liaison Officer, Forest Glen Section, WRAMC, Washington, DC 20307-5001, or calling DSN 295-7476 or commercial (301) 295-7476. You may electronically access AFPMB publications via the AFPMB Home Page: <http://www-afpmb.acq.osd.mil>

### **G. List Maintenance.**

This list is published by the Armed Forces Pest Management Board to provide current information to the DOD Pest Management Community. Comments and questions are welcome. Please sent them to: Armed Forces Pest Management Board, Equipment Committee, ATTN: Contingency Liaison Officer, Forest Glen Section, WRAMC, Washington, DC 20307-5001, or phone Commercial (301) 295-7476, or DSN 295-7476, or FAX Commercial (301) 295-7476.

## **DOD PESTICIDE HOTLINE**